



PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 8

Complete if Known

Application Number	10/673,693
Filing Date	September 29, 2003
First Named Inventor	Steve Zhihua Zeng
Art Unit	2672
Examiner Name	Jin Cheng Wang
Attorney Docket Number	1459-0300620 (1459-VIXS062)

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
Jin	AA	US 5,027,203	06-25-1991	Samad, et al.	
Jin	AB	US 5,115,812	05-26-1992	Sano, et al.	
Jin	AC	US 5,475,434	12-12-1995	Kim	
Jin	AD	US 5,602,589	02-11-1997	Vishwanath, et al.	
Jin	AE	US 5,635,985	06-03-1997	Boyce, et al.	
Jin	AF	US 5,644,361	07-01-1997	Ran, et al.	
Jin	AG	US 5,652,749	07-29-1997	Davenport, et al.	
Jin	AH	US 5,732,391	03-24-1998	Fiocca	
Jin	AI	US 5,737,020	04-07-1998	Hall, et al.	
Jin	AJ	US 5,740,028	04-14-1998	Sugiyama, et al.	
Jin	AK	US 5,940,130	08-17-1999	Nilsson, et al.	
Jin	AL	US 5,996,029	11-30-1999	Sugiyama, et al.	
Jin	AM	US 6,005,623	12-21-1999	Takahashi, et al.	
Jin	AN	US 6,005,624	12-21-1999	Vainsencher	
Jin	AO	US 6,014,694	01-11-2000	Aharoni, et al.	
Jin	AP	US 6,040,863	03-21-2000	Kato	
Jin	AQ	US 6,081,295	06-27-2000	Adolph, et al.	
Jin	AR	US 6,141,693	10-31-2000	Pertman, et al.	
Jin	AS	US 6,144,402	11-07-2000	Norsworthy, et al.	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
Jin	AT	EP 0661826 A2	07-05-1995	IBM		
Jin	AU	EP 0739138 A2	10-23-1996	Kalmanek, et al.		
Jin	AV	EP 0805599 A2	11-05-1997	OkI Electric Industry		
Jin	AW	EP 0855805 A2	07-29-1998	Sharp KK		
Jin	AX	EP 0896300 B1	02-10-1999	Matsushita Electric		
Jin	AY	EP 0901285 A1	02-10-1999	Yamauchi		

Examiner
Signature*Jin Cheng Wang*Date
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Sheet 2

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		Number-Kind Code ² (if known)			
Jmw	AZ	US 6,167,084	12-26-2000	Wang, et al.	
Jmw	BA	US 6,182,203	01-30-2001	Simar, Jr., et al.	
Jmw	BB	US 6,215,821	04-10-2001	Chen	
Jmw	BC	US 6,219,358	04-17-2001	Pinder, et al.	
Jmw	BD	US 6,222,886 B1	04-24-2001	Yogeshwar	
Jmw	BE	US 6,236,683	05-22-2001	Mougeat, et al.	
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	BI	US 6,314,138	11-06-2001	Lemaguet	
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	BK	US 6,366,614	04-02-2002	Pian, et al.	
	BL	US 6,385,248	05-07-2002	Pearlstein, et al.	
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Jmw	BS	EP 0955607 A2	11-10-1999	Sarnoff Corp.	
	BT	EP 1032214 A2	08-30-2000	Matsushita Electric	
	BU	WO 01/95633 A2	12-13-2001	Gen Instrument Group	
	BV	WO 02/080518 A2	10-10-2002	Laksono	
	BW	JP 07-210670 A	08-11-1995	Fuji Xerox Ltd.	
✓	BX	EP 1087625 A2	03-28-2001	Sostawa et al.	

Examiner
Signature

Jin Cheng Wang

Date
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		Number-Kind Code ² (If Known)			
<i>Jmw</i>	BY	US- 6,438,168	08-20-2002	Arye	
	BZ	US- 2001/0026591 A1	10-04-2001	Keren, et al.	
	CA	US- 2002/110193 A1	08-15-2002	Kyoon, et al.	
	CB	US- 2002/138259 A1	09-26-2002	Kawahara	
	CC	US- 2002/196851 A1	12-26-2002	Arnaud	
	CD	US- 2002/106022 A1	08-08-2002	Takahashi, et al.	
	CE	US- 2003/0152148 A1	08-14-2003	Laksono	
	CF	US- 4,866,395	09-12-1989	Hosteller	
	CG	US- 6,549,561	04-15-2003	Crawford	
	CH	US- 5,093,847	03-03-1992	Cheng	
	CI	US- 5,253,056	10-12-1993	Puri	
	CJ	US- 6,714,202	03-03-2004	Dorrell	
	CK	US- 5,844,545	12-01-1992	Suzuki, et al.	
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	CM	US- 5,850,443	12-15-1998	Van Oorschot, et al.	
	CN	US- 2002/0145931 A1	10-10-2002	Pitts	
	CO	US- 2003/0093661 A1	05-15-2003	Loh, et al.	
		US-			
		US-			

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Examiner Signature	<i>Jin Cheng Wang</i>	Date Considered	<i>10/10/05</i>
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		Art Unit	2672
		Examiner Name	Jin Cheng Wang
Attorney Docket Number	1459-0300620 (1459-VIXS062)		
Sheet	4	of	8

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Jm	CP	YU, Donghoom, et al., "Fast Motion Estimation for Shape Coding in MPEG-4," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 13, No. 4, 2003 IEEE, April 2003, pp. 358-363	
Jm	CQ	PYUN, Jae-Young, "QoS Provisioning for Video Streaming Over IEEE 802.11 Wireless LAN," (abridged) IEEE Conferences in Consumer Electronics, June 16, 2003, EE Times, Seoul, Korea, <http://eetimes.com/printableArticle?doc_id=OEG2003061S0070> retrieved July 8, 2003	
Jm	CR	YOUN, Jeongnam et al., "Video Transcoding For Multiple Clients," Proceedings of the SPIE, Bellingham, VA, vol. 4067, XP008012075, pp. 76-85, University of Washington, Seattle, WA	
Jm	CS	LENGWEHASATIT, Krisda et al., "Computationally Scalable Partial Distance Based Fast Search Motion Estimation," Packet Video Corp., San Diego, California	
Jm	CT	TAKAHASHI, Kuniaki, et al., "Motion Vector Synthesis Algorithm for MPEG2-to-MPEG4 Transcoder," Proceedings of the SPIE, Bellingham, VA, vol. 4310, Sony Corporation, XP008000078, pp. 387-882, 2001 SPIE	
Jm	CU	SOARES, Luis Ducla, et al., "Influence of Encoder Parameters on the Decoded Video Quality for MPEG-4 Over W-CDMA Mobile Networks," NTT DoCoMo, Inc.	
Jm	CV	AGGARWAL, Manoj et al., "Efficient Huffman Decoding," 2000 IEEE, 0-7803-6297-7, pp. 936-939, University of Illinois at Urbana-Champaign, Urbana, IL	
Jm	CW	SHERWOOD, P. Greg et al., "Efficient Image and Channel Coding for Wireless Packet Networks," University of California, La Jolla, California	
Jm	CX	ASSUNCAO, Pedro et al., "Rate Reduction Techniques for MPEG-2 Video Bit Streams," SPIE, Vol. 2952, April 1996, pp. 450-459, University of Essex, Colchester, England	
Jm	CY	YIN, Peng et al., "Video Transcoding by Reducing Spatial Resolution," Princeton University, 2000, Princeton, New Jersey	

Examiner Signature	<i>Jin Cheng Wang</i>	Date Considered	10/10/05
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Jmw	CZ	SHANABLEH, Tamer et al., "Heterogeneous Video Transcoding to Lower Spatio-Temporal Resolutions and Difference Encoding Formats," IEEE Transactions on Multimedia, Vol. 2, No. 2, June 2000, pp. 101-110, Engineering and Physical Sciences Research Council, Colchester, U.K.	
	DA	WIEGAND, Thomas et al., "Long-Term Memory Motion-Compensated Prediction for Robust Video Transmission," in Proc. ICIP 2000, University of Erlangen-Buremberg, Erlangen, Germany	
	DB	FAN, Zhigang et al. "Maximum Likelihood Estimation of JPEG Quantization Table in the Identification of Bitmap Compression History," Xerox Corporation, Webster, New York	
	DC	THOMAS, Shine M. et al., "An Efficient Implementation of MPEG-2 (BC1) Layer 1 & Layer 2 Stereo Encoder on Pentium-III Platform", pp. 1-10, Sasken Communication Technologies Limited, Bangalore, India,	
	DD	RAMANUJAN, Ranga S. et al., "Adaptive Streaming of MPEG Video Over IP Networks," 22nd IEEE Conference on Local Computer Networks (LCN '97), November 02-05, 1997, 1997 IEEE. pp. 398-409, Architecture Technology Corporation, Minneapolis, MN	
	DE	REJAIE, Reza et al., "Architctural Considerations for Playback of Quality Adaptive Video Over the Internet," XP002177090, 2000 IEEE pp. 204-209, AT&T Labs, Menlo Park, California	
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	DG	CHALIDABHONGSE, Junavit et al., "Fast Motion Vector Estimation Using Multiresolution-Spatio-Temporal Correlations," IEEE Transactions On Circuits and Systems For Video Technology, vol. 7, no. 3 June 1997, pp. 477-488	
	DH	OH, Hwang-Seok et al., "Block-Matching Algorithm Based On An Adaptive Reduction of the Search Area For Motion Estimation," Real-Time Imaging, Academic Press Ltd., Vol. 56, No. 5, Oct 2000, pp. 407-414, XP004419498 ISSN: 1077-2014, Taejon, Korea	
✓	DI	LEE, Liang-Wei et al., "Dynamic Search-Window Adjustment and Interlaced Search for Block-Matching Algorithm," IEEE Transactions On Circuits and Systems for Video Technology," IEEE, Vol. 3, No. 1, 3 Feb 1993, pp. 85-87, XP000334581 ISSN: 1051-8215, New York	

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Sheet 6 of 8

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Jmw	DJ	FUKUNAGA, Shigeru et al., "MPEG-4 Video Verification Model Version 16.0" International Organization for Standardization: Coding of Moving Pictures and Audio, Vol. N3312, March 2000, pp. 1-380, XP000861688,	
	DK	KRONER, Sabine et al., "Edge Preserving Noise Smoothing With An Optimized Cubic Filter," DEEI, University of Trieste, Trieste, Italy	
	DL	KIM, Jaemin et al., "Spatiotemporal Adaptive 3-D Kalman Filter for Video," pp. 1-12. Samsung Semiconductor, Inc. San Jose, California	
	DM	LIU, Julia J., "ECE497KJ Course Project: Applications of Wiener Filtering In Image and Video De-Noising," pp. 1-15, May 21, 1997	
	DN	JOSTSCHULTE, K. et al., "A Subband Based Spatio-Temporal Noise Reduction Technique for Interlaced Video Signals," University Dortmund, Dortmund, Germany	
	DO	KOSSENTINI, Faouzi et al. "Predictive RD Optimized Motion Estimation for Very Low Bit-Rate Video Coding," 1997 IEEE, XP-000726013, pp. 1752-1963, September 1, 1996, 1997 International Conference on Image Processing, Vancouver, Canada	
	DP	TOURAPIS, Alexis et al. "New Results on Zonal Based Motion Estimation Algorithms - Advanced Predictive Diamond Zonal Search," 2001 IEEE, pp. V 183-V 186, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong	
	DQ	BRANDENBURG, Karlheinz, "MP3 and AAC Explained," Proceedings of AES 17th International Conference, XP008004053, pp. 99-110, Erlangen, Germany	
	DR	PAINTER, Ted et al., "Perceptual Coding of Digital Audio," Proceedings of the IEEE, Vol. 88, No. 4, April 2000, pp. 451-513, XP001143231, ISSN: 0018-9219, Arizona State University, Tempe, AZ	
	DS	HASSANZADEGAN, Hooman et al., "A New Method for Clock Recovery in MPEG Decoders," pp. 1-8, Basamad Negar Company, Tehran, Iran	

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Jm	DT	KAN, Kou-Sou et al., "Low-Complexity and Low-Delay Video Transcoding for Compressed MPEG-2 Bitstream," Natinal Central University, Chung-Li, Taiwan	
	DU	MITCHELL et al., "MPEG Video Compression Standard: 15.2 Encoder and Decoder Buffering," Chapman and Hall Digital Multimedia Standards Series, pp. 340-356, XP002115299, ISBN: 0-412-08771-5, Chapman and Hall, New York	
	DV	WHYBRAY, M.W. et al., "Video Coding - Techniques, Standards and Applications," BT Technol J. Vol. 14, No. 4, 4 October 1997, pp. 86-100, XP000722036	
	DW	"SHARP Product Information: VTST-Series NTSC/PAL Electronic Television Tuners," RF Components Group, Sharp Microelectronics of the America, 1997	
	DX	EDWARDS, Larry M., "Satisfying Your Need for Net Speed," San Diego Metropolitan, September 1999, <<www.sandiegometro.com/1999/sep/speed.html>>, retrieved on 07/19/2001	
	DY	OZ, Ran et al., "Unified Headend Technical Management of Digital Services," BigBend Networks, Inc.	
	DZ	MURIEL, Chris, "What is Digital Satellite Television?," What is Digital Television Rev. 3.0, April 21, 1999, SatCure, Sandbach, England, <<http://www.netcentral.co.uk/satcure/digfaq.htm>>, access on 04/20/2001	
	EA	"CONEXANT Products & Tech Info: Product Briefs: CX24108," 2000-2002 Conexant Systems, Inc. access on 04/20/2001	
	EB	"CONEXANT Products & Tech Info: Product Briefs: CX22702," 2000-2002 Conexant Systems, Inc. access on 04/20/2001	
	EC	"TDC: Components for Modems & Digital Infotainment: Direct Broadcast Satellite Chlpset," 2001 Telecom Design Communications Ltd., U.K., <<http://www.tdc.co.uk/modmulti/settop/index.htm>>, access on 04/20/2001	

Examiner Signature	<i>Jin Cheng Wang</i>	Date Considered	10/10/03
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/673,693
		Filing Date	September 29, 2003
		First Named Inventor	Steve Zhihua Zeng
		Art Unit	2672
		Examiner Name	Jin Cheng Wang
Sheet 8	of 8	Attorney Docket Number	1459-0300620 (1459-VIXS062)

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>gml</i>	ED	"White Paper: Super G: Maximizing Wireless Performance," March 2004, Atheros Communications, Inc., pp. 1-20, Document No. 991-00006-001, Sunnyvale, California	
	EE	KWOK, Y.K. et al., "Efficient Multiple Access Control Using a Channel-Adaptive Protocol for a Wireless ATM-Based Multimedia Services Network," March 29, 2000, Computer Communications 24(2001) 970-983, University of Hong Kong, Hong Kong, PRC	
	EF	LIANG, Ying-Chang et al., "Joint Downlink Beamforming, Power Control, and Data Rate Allocation for DS-CDMA Mobile Radio with Multimedia Services," 2000 IEEE, pp. 1455-1457, Ceneter for Wireless Communication, Singapore	
	EG	RAZAVI, Behzad, "Challenges in Portable RF Transceiver Design," September 1996, 1996 IEEE, pp. 12-25, Circuits & Devices	
	EH	MANNION, Patrick, "IceFyre Device Cools 802.11a Power Consumption," September 24, 2001, Planet Analog, National Semiconductor, << http://www.planetanalog.com/story/OEG20010924S0079 >>, access on 11/05/2001	
	EI	"ICE Fyre Semiconductor: IceFyre 5-GHz OFDM Modem Solution," September 2001, pp. 1-6, ICEFYRE: Rethink Wireless, IceFyre Semiconductor, Inc.	
	EJ	POZAR, David M., "Theory and Design of Ferrimagnetic Components," 1990, pp. 529, Microwave Engineering, Addison-Wesley Publishing Company, Inc.	
	EK	"Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: High-Speed Physical Layer in the 5 GHz Band," 1999 IEEE, pp. 1-83, Supplement to IEEE Standard for Information Technology, IEEE Std 802.11a-1999, LAN/MAN Standards Committee	
	EL	CICIORA, Walter S., "Cable Television in the United States: An Overview," May 25, 1995, pp. 1-90, Cable Television Laboratories, Inc., Louisville, Colorado	

Examiner Signature	<i>Jin Cheng Wang</i>	Date Considered	10/10/05
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